

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-8 (Cancelled)

Claim 9 (Currently Amended): A polypeptide fusion construct that inhibits [[the]]
signalling via NF- κ B pathway, said construct comprising:

a polypeptide having a high transduction potential, and

an amino acid sequence selected from the group consisting of SEQ ID NO: 3, SEQ ID NO: 7, SEQ ID NO: 14, SEQ ID NO: 16, SEQ ID NO: 30, SEQ ID NO: 31, SEQ ID NO: 32, SEQ ID NO: 33, SEQ ID NO: 34, SEQ ID NO: 35, SEQ ID NO: 36, SEQ ID NO: 37, SEQ ID NO: 38, and SEQ ID NO: 39, or a variant thereof having one amino acid substitution;

~~wherein said amino acid sequence is linked to~~

~~a polypeptide having a high transduction potential;~~

wherein said polypeptide having a high transduction potential and said amino acid sequence are optionally linked by an amino acid spacer sequence.

Claim 10 (Currently Amended): The polypeptide fusion construct of Claim 9, wherein said polypeptide fusion construct disrupts NEMO (NF- κ B essential modulator) oligomerization.

Claim 11 (Currently Amended): The polypeptide fusion construct of Claim 9, which is linked by an amino acid spacer sequence having a length ranging from 1-35 amino acids.

Claim 12 (Currently Amended): The polypeptide fusion construct of Claim 11, wherein said amino acid spacer sequence is selected from the group consisting of SEQ ID NO: 9 and SEQ ID NO: 10.

Claim 13 (Currently Amended): The polypeptide fusion construct of Claim 9, wherein said polypeptide having a high transduction potential ~~[[has an]]~~ comprises the amino acid sequence of SEQ ID NO: 1.

Claim 14 (Currently Amended): The polypeptide fusion construct of Claim 13, wherein the polypeptide fusion construct has the amino acid sequence selected in the group consisting of SEQ ID NO: 2, SEQ ID NO: 6, SEQ ID NO: 13 and SEQ ID NO: 15.

Claim 15 (Currently Amended): A method of inhibiting the NF- κ B signaling pathway comprising contacting *in vitro* an eukaryotic cell with ~~[[a]]~~ the polypeptide fusion construct of Claim 9.

Claim 16 (Withdrawn, Currently Amended): A method of disrupting NEMO oligomerization comprising contacting *in vitro* ~~said~~ NEMO with ~~[[a]]~~ the polypeptide fusion construct of Claim 9.

Claim 17 (Withdrawn, Currently Amended): A method of treating a disorder regulated by ~~the~~ NF- κ B signaling ~~pathway~~ comprising:

administering an effective amount of a composition comprising a polypeptide fusion construct of Claim ~~[[1]]~~ 9 and one or more pharmaceutically acceptable carriers or excipients, to a subject in need thereof.

Claim 18 (Withdrawn): The method of Claim 17, wherein said subject in need thereof is a human.

Claim 19 (Withdrawn, Currently Amended): The method of Claim 17, comprising administering an effective amount of the polypeptide fusion construct ranging wherein said effective amount ranges from 0.1 mg/Kg/day to 30 mg/Kg/day.

Claim 20 (Withdrawn, Currently Amended): The method of Claim 17, wherein said disorder regulated by the NF- κ B signaling pathway is selected from the group consisting of inflammatory responses, oncogenesis, and viral infection.

Claim 21 (Withdrawn, Currently Amended): The method of Claim 17, comprising administering wherein said composition ~~is administered~~ in a form selected from the group consisting of oral, rectal, nasal, parenteral, intracisternal, intravaginal, intraperitoneal, sublingual, topical, and bucal administration.

Claim 22 (Withdrawn, Currently Amended): The method of Claim 17, comprising administering wherein said composition ~~is administered preferably~~ intravenously.

Claim 23 (Withdrawn, Currently Amended): A method for regulating cell proliferation or apoptosis comprising administering to a subject in need thereof an effective amount of a composition comprising ~~[[a]]~~ the polypeptide fusion construct of Claim 9 and one or more pharmaceutically acceptable carriers or excipients, ~~to a subject in need thereof~~.

Claim 24 (Withdrawn): The method of Claim 23, wherein said subject in need thereof is a human.

Claim 25 (Withdrawn, Currently Amended): The method of Claim 23, comprising administering an ~~wherein said~~ effective amount of the polypeptide fusion construct ranging ~~ranges~~ from 0.1 mg/Kg/day to 30 mg/Kg/day.

Claim 26 (Withdrawn, Currently Amended): The method of Claim 23, comprising administering ~~wherein said composition is administered~~ in a form selected from the group consisting of oral, rectal, nasal, parenteral, intracisternal, intravaginal, intraperitoneal, sublingual, topical, and bucal administration.

Claim 27 (Withdrawn, Currently Amended): The method of Claim 23, comprising administering ~~wherein said composition is administered~~ ~~preferably~~ intravenously.

Claim 28 (Withdrawn, Currently Amended): A method for regulating B or T lymphocytes in antigenic stimulation comprising administering to a subject in need thereof an effective amount of a composition comprising a polypeptide fusion construct of Claim 9 and one or more pharmaceutically acceptable carriers or excipients, ~~to a subject in need thereof~~.

Claim 29 (Withdrawn): The method of Claim 28, wherein said subject in need thereof is a human.

Claim 30 (Withdrawn, Currently Amended): The method of Claim 28, wherein said effective amount of the polypeptide fusion construct ranges from 0.1 mg/Kg/day to 30 mg/Kg/day.

Claim 31 (Withdrawn): The method of Claim 28, wherein said composition is administered in a form selected from the group consisting of oral, rectal, nasal, parenteral, intracisternal, intravaginal, intraperitoneal, sublingual, topical, and bucal administration.

Claim 32 (Withdrawn, Currently Amended): The method of Claim 28, wherein said composition is administered ~~preferably~~ intravenously.

Claims 33-53 (Cancelled)

Claim 54 (Currently Amended): The polypeptide fusion construct of Claim 9, wherein said amino acid sequence is polypeptide is at least 70% identical to said amino acid sequence identical to a sequence selected from the group consisting of SEQ ID NO: 3, SEQ ID NO: 7, SEQ ID NO: 14, SEQ ID NO:16, SEQ ID NO: 30, SEQ ID NO: 31, SEQ ID NO: 32, SEQ ID NO: 33, SEQ ID NO: 34, SEQ ID NO: 35, SEQ ID NO: 36, SEQ ID NO: 37, SEQ ID NO: 38, and SEQ ID NO: 39.

Claim 55 (Currently Amended): The polypeptide fusion construct of Claim 9, wherein said amino acid sequence is a variant having one amino acid substitution in a sequence selected from the group consisting of SEQ ID NO: 3, SEQ ID NO: 7, SEQ ID NO:14, SEQ ID NO: 16, SEQ ID NO: 30, SEQ ID NO: 31, SEQ ID NO: 32, SEQ ID NO: 33, SEQ ID NO: 34, SEQ ID NO: 35, SEQ ID NO: 36, SEQ ID NO: 37, SEQ ID NO: 38, and SEQ ID NO: 39

~~polypeptide is at least 80% identical to said amino acid sequence.~~

Claim 56 (Currently Amended): The polypeptide fusion construct of Claim 9, wherein said amino acid sequence is SEQ ID NO: 14 or SEQ ID NO: 16 ~~polypeptide is at least 90% identical to said amino acid sequence.~~

Claim 57 (Currently Amended): The polypeptide fusion construct of Claim 9, wherein said peptide having high transduction potential comprises a peptide other than ANT (SEQ ID NO: 1)

~~polypeptide is at least 95% identical to said amino acid sequence.~~